ABSTRACT OF THE DISCLOSURE

A sub-micrometer-resolution optical coherence tomography device. The device, for measuring an object, comprises a light source emitting short wavelength light, converted to a first beam with a broad wavelength spectrum by passage through phosphor, an interferometer splitting the first beam into a second beam and a third beam, and a reflective mirror reflecting the second beam to create a reference beam. The third beam is reflected by the object to create a fourth beam, interferometrically combined with the reference beam in the interferometer to generate interference fringes. Due to the broad wavelength spectrum, ultra-short coherence length is obtained, providing ultra-high resolution of sub-micrometer scale.